

ABSTRACT OF THE DISCLOSURE

Graphite platelets derived from microwaves or other radiofrequency wave treatment graphite to produce expanded graphite which is then pulverized. A composite produced from the platelets therefrom are described. The preferred method of expanding the graphite is by microwaves or other radiofrequency wave treatment of an intercalated graphite. The expanded graphite is then crushed (pulverized) to produce platelets which are substantially all 200 microns or less. The graphite platelets are used in polymer composites. The graphite platelets are particularly useful for batteries, anodes and fuel cells.